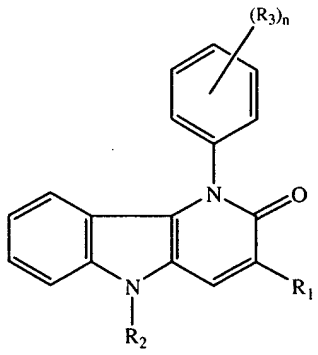
CLAIMS

1. A compound of formula (I)



(I)

its *N*-oxide, salt, stereoisomeric form, racemic mixture, prodrug, ester or metabolite, wherein

n is 1, 2 or 3;

R_1 is hydrogen, cyano, halo, aminocarbonyl, hydroxycarbonyl, C_{1-4}alkyloxycarbonyl, C_{1-4}alkylcarbonyl, mono- or di(C_{1-4}alkyl)aminocarbonyl, arylaminocarbonyl, *N*-(aryl)-*N*-(C_{1-4}alkyl)aminocarbonyl, methanimidamidyl, *N*-hydroxy-methanimidamidyl, mono- or di(C_{1-4}alkyl)methanimidamidyl, Het_1 or Het_2;

R_2 is hydrogen, C_{1-10}alkyl, C_{2-10}alkenyl, C_{3-7}cycloalkyl, wherein said C_{1-10}alkyl, C_{2-10}alkenyl and C_{3-7}cycloalkyl, each individually and independently, may be optionally substituted with a substituent selected from the group consisting of cyano, $NR_{4a}R_{4b}$, pyrrolidinyl, piperidinyl, homopiperidinyl, piperazinyl, 4-(C_{1-4}alkyl)-piperazinyl, morpholinyl, thiomorpholinyl, 1-oxothiomorpholinyl, 1,1-dioxo-thiomorpholinyl, aryl, furanyl, thienyl, pyrrolyl, oxazolyl, thiazolyl, imidazolyl, isoxazolyl, isothiazolyl, pyrazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, triazinyl, hydroxycarbonyl, C_{1-4}alkylcarbonyl, N($R_{4a}R_{4b}$)carbonyl, C_{1-4}alkyloxycarbonyl, pyrrolidin-1-ylcarbonyl, piperidin-1-ylcarbonyl, homopiperidin-1-ylcarbonyl, piperazin-1-ylcarbonyl, 4-(C_{1-4}alkyl)-piperazin-1-ylcarbonyl, morpholin-1-ylcarbonyl, thiomorpholin-1-ylcarbonyl, 1-oxothiomorpholin-1-ylcarbonyl and 1,1-dioxo-thiomorpholin-1-ylcarbonyl;

R_3 is nitro, cyano, amino, halo, hydroxy, C_{1-4}alkyloxy, hydroxycarbonyl, aminocarbonyl, C_{1-4}alkyloxycarbonyl, mono- or di(C_{1-4}alkyl)aminocarbonyl, C_{1-4}alkylcarbonyl, methanimidamidyl, mono- or di(C_{1-4}alkyl)methanimidamidyl, *N*-hydroxy-methanimidamidyl or Het_1;

R_{4a} is hydrogen, C_{1-4}alkyl or C_{1-4}alkyl substituted with a substituent selected from the group consisting of amino, mono- or di(C_{1-4}alkyl)amino, pyrrolidinyl, piperidinyl,

homopiperidinyl, piperazinyl, 4-(C_{1-4}alkyl)-piperazinyl, morpholinyl, thiomorpholinyl, 1-oxothiomorpholinyl and 1,1-dioxo-thiomorpholinyl;

R_{4b} is hydrogen, C_{1-4}alkyl or C_{1-4}alkyl substituted with a substituent selected from the group consisting of amino, mono- or di(C_{1-4}alkyl)amino, pyrrolidinyl, piperidinyl, homopiperidinyl, piperazinyl, 4-(C_{1-4}alkyl)-piperazinyl, morpholinyl, thiomorpholinyl, 1-oxothiomorpholinyl and 1,1-dioxo-thiomorpholinyl;

aryl is phenyl optionally substituted with one or more substituents each individually selected from the group consisting of C_{1-6}alkyl, C_{1-4}alkoxy, halo, hydroxy, amino, trifluoromethyl, cyano, nitro, hydroxyC_{1-6}alkyl, cyanoC_{1-6}alkyl, mono- or di(C_{1-4}alkyl)amino, aminoC_{1-4}alkyl, mono- or di(C_{1-4}alkyl)aminoC_{1-4}alkyl;

Het_1 is a 5-membered ring system wherein one, two, three or four ring members are heteroatoms each individually and independently selected from the group consisting of nitrogen, oxygen and sulfur, and wherein the remaining ring members are carbon atoms; and, where possible, any nitrogen ring member may optionally be substituted with C_{1-4}alkyl; any ring carbon atom may, each individually and independently, optionally be substituted with a substituent selected from the group consisting of C_{1-4}alkyl, C_{2-6}alkenyl, C_{3-7}cycloalkyl, hydroxy, C_{1-4}alkoxy, halo, amino, cyano, trifluoromethyl, hydroxyC_{1-4}alkyl, cyanoC_{1-4}alkyl, mono- or di(C_{1-4}alkyl)amino, aminoC_{1-4}alkyl, mono- or di(C_{1-4}alkyl)aminoC_{1-4}alkyl, arylC_{1-4}alkyl, aminoC_{2-6}alkenyl, mono- or di(C_{1-4}alkyl)aminoC_{2-6}alkenyl, furanyl, thienyl, pyrrolyl, oxazolyl, thiazolyl, imidazolyl, isoxazolyl, isothiazolyl, pyrazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, aryl, hydroxycarbonyl, aminocarbonyl, C_{1-4}alkyloxycarbonyl, mono- or di(C_{1-4}alkyl)aminocarbonyl, C_{1-4}alkylcarbonyl, oxo, thio; and wherein any of the foregoing furanyl, thienyl, pyrrolyl, oxazolyl, thiazolyl, imidazolyl, isoxazolyl, isothiazolyl, pyrazolyl, oxadiazolyl, thiadiazolyl and triazolyl moieties may optionally be substituted with C_{1-4}alkyl;

Het_2 is pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl or triazinyl, wherein any ring carbon atom of each of said 6-membered nitrogen containing aromatic rings may optionally be substituted with a substituent selected from the group consisting of C_{1-4}alkyl;

provided that the compound of formula (I) is different from
2,5-dihydro-1-(4-nitrophenyl)-2-oxo-1H-pyrido[3,2-b]indole-3-carbonitrile, and
2,5-dihydro-5-methyl-1-(4-nitrophenyl)-2-oxo-1H-pyrido[3,2-b]indole-3-carbonitrile.

2. A compound according to claim 1 wherein n is 1, R_3 is nitro, R_1 is cyano, C_{1-4}alkyloxycarbonyl or C_{1-4}alkylaminocarbonyl; and R_2 is hydrogen or C_{1-6}alkyl.

3. A compound according to claim 1 or 2 wherein

n is 1 or 2;

R_3 is nitro, cyano, amino, halo, hydroxy, C_{1-4}alkyloxy, hydroxycarbonyl, aminocarbonyl, aminothiocarbonyl, C_{1-4}alkyloxycarbonyl, C_{1-4}alkylcarbonyl, mono- or di(C_{1-4}alkyl)methanimidamidyl, *N*-hydroxy-methanimidamidyl or Het_1.

4. A compound according to any one of claims 1 to 3 wherein

R_1 is hydrogen, cyano, halo, aminocarbonyl, hydroxycarbonyl, C_{1-4}alkyloxycarbonyl, arylaminocarbonyl, *N*-hydroxy-methanimidamidyl, mono- or di(C_{1-4}alkyl)-methanimidamidyl, Het_1 or Het_2; and

aryl is phenyl optionally substituted with one or more substituents each individually selected from the group consisting of C_{1-6}alkyl, C_{1-4}alkoxy, cyano, nitro; and

Het_1 is a 5-membered ring system wherein one, two, three or four ring members are heteroatoms each individually and independently selected from the group consisting of nitrogen, oxygen and sulfur, and wherein the remaining ring members are carbon atoms; and, where possible, any nitrogen ring member may optionally be substituted with C_{1-4}alkyl; any ring carbon atom may, each individually and independently, optionally be substituted with a substituent selected from the group consisting of C_{1-4}alkyl, C_{3-7}cycloalkyl, halo, cyano, trifluoromethyl, cyanoC_{1-4}alkyl, mono- or di(C_{1-4}alkyl)amino, mono- or di(C_{1-4}alkyl)aminoC_{2-6}alkenyl, isoxazolyl, aryl, hydroxycarbonyl, C_{1-4}alkyloxycarbonyl, oxo, thio; and wherein the foregoing isoxazolyl may optionally be substituted with C_{1-4}alkyl; and

Het_2 is pyridyl.

5. A compound according to any one of claims 1 to 4 wherein

R_2 is hydrogen, C_{1-10}alkyl, C_{2-10}alkenyl, C_{3-7}cycloalkyl or C_{1-10}alkyl substituted with substituent selected from the group consisting of cyano, $NR_{4a}R_{4b}$, pyrrolidinyl, piperidinyl, 4-(C_{1-4}alkyl)-piperazinyl, morpholinyl, aryl, imidazolyl, pyridyl, hydroxycarbonyl, N($R_{4a}R_{4b}$)carbonyl, C_{1-4}alkyloxycarbonyl or 4-(C_{1-4}alkyl)-piperazin-1-ylcarbonyl; and

R_{4a} is C_{1-4}alkyl; and

R_{4b} is C_{1-4}alkyl or C_{1-4}alkyl substituted morpholinyl.

6. A compound according to any one of claims 1 to 5 wherein

R_2 is hydrogen, C_{1-10}alkyl, C_{2-10}alkenyl, C_{3-7}cycloalkyl or C_{1-10}alkyl substituted with substituent selected from the group consisting of cyano, $NR_{4a}R_{4b}$, pyrrolidinyl, piperidinyl, 4-(C_{1-4}alkyl)-piperazinyl, morpholinyl, aryl, imidazolyl, pyridyl,

hydroxycarbonyl, N($R_{4a}R_{4b}$)carbonyl, C_{1-4}alkyloxycarbonyl or 4-(C_{1-4}alkyl)-piperazin-1-ylcarbonyl; and

aryl is phenyl optionally substituted with one or more substituents each individually selected from the group consisting of C_{1-6}alkyl, C_{1-4}alkoxy, cyano, nitro.

7. A compound according to any one of claims 1 to 6 wherein

R_2 is hydrogen, C_{1-10}alkyl, C_{2-10}alkenyl, C_{3-7}cycloalkyl or C_{1-10}alkyl substituted with substituent selected from the group consisting of cyano, $NR_{4a}R_{4b}$, pyrrolidinyl, piperidinyl, 4-(C_{1-4}alkyl)-piperazinyl, morpholinyl, aryl, imidazolyl, pyridyl, hydroxycarbonyl, N($R_{4a}R_{4b}$)carbonyl, C_{1-4}alkyloxycarbonyl or 4-(C_{1-4}alkyl)-piperazin-1-ylcarbonyl; and

aryl is phenyl optionally substituted with one or more substituents each individually selected from the group consisting of C_{1-6}alkyl, C_{1-4}alkoxy, cyano, nitro; and

R_{4a} is C_{1-4}alkyl; and

R_{4b} is C_{1-4}alkyl or C_{1-4}alkyl substituted morpholinyl.

8. A compound according to any one of claims 1 to 7 wherein

R_3 is nitro, cyano, amino, halo, hydroxy, C_{1-4}alkyloxy, hydroxycarbonyl, aminocarbonyl, aminothiocarbonyl, C_{1-4}alkyloxycarbonyl, C_{1-4}alkylcarbonyl, mono- or di(C_{1-4}alkyl)methanimidamidyl, *N*-hydroxy-methanimidamidyl or Het_1; and

Het_1 is a 5-membered ring system wherein one, two, three or four ring members are heteroatoms each individually and independently selected from the group consisting of nitrogen, oxygen and sulfur, and wherein the remaining ring members are carbon atoms; and, where possible, any nitrogen ring member may optionally be substituted with C_{1-4}alkyl; any ring carbon atom may, each individually and independently, optionally be substituted with a substituent selected from the group consisting of C_{1-4}alkyl, C_{3-7}cycloalkyl, halo, cyano, trifluoromethyl, cyanoC_{1-4}alkyl, mono- or di(C_{1-4}alkyl)amino, mono- or di(C_{1-4}alkyl)aminoC_{2-6}alkenyl, isoxazolyl, aryl, hydroxycarbonyl, C_{1-4}alkyloxycarbonyl, oxo, thio; and wherein the foregoing isoxazolyl may optionally be substituted with C_{1-4}alkyl.

9. A compound according to any one of claims 1 to 8 wherein

n is 1 or 2, more in particular wherein n is 1; and

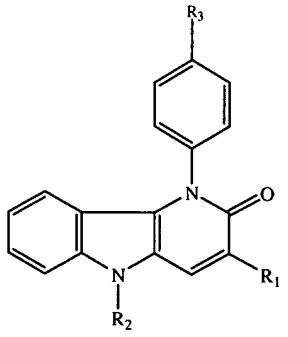
R_1 is hydrogen, cyano, halo, aminocarbonyl, hydroxycarbonyl, C_{1-4}alkyloxycarbonyl, arylaminocarbonyl, *N*-hydroxy-methanimidamidyl, mono- or di(C_{1-4}alkyl)-methanimidamidyl, Het_1 or Het_2; and

R_2 is hydrogen, C_{1-10}alkyl, C_{2-10}alkenyl, C_{3-7}cycloalkyl or C_{1-10}alkyl substituted with substituent selected from the group consisting of cyano, $NR_{4a}R_{4b}$, pyrrolidinyl,

piperidinyl, 4-(C_{1-4}alkyl)-piperazinyl, morpholinyl, aryl, imidazolyl, pyridyl, hydroxycarbonyl, N($R_{4a}R_{4b}$)carbonyl, C_{1-4}alkyloxycarbonyl or 4-(C_{1-4}alkyl)-piperazin-1-ylcarbonyl; and

R_3 is nitro, cyano, amino, halo, hydroxy, C_{1-4}alkyloxy, hydroxycarbonyl, aminocarbonyl, aminothiocarbonyl, C_{1-4}alkyloxycarbonyl, C_{1-4}alkylcarbonyl, mono- or di(C_{1-4}alkyl)methanimidamidyl, *N*-hydroxy-methanimidamidyl or Het_1.

10. A compound according to any one of claims 1 to 9 wherein the compound has the formula (II).



(II)

11. A compound according to any one of claims 1 to 10 wherein R_3 is nitro.

12. A compound according to any one of claims 1 to 11 wherein R_1 is cyano.

13. A compound according to any one of claims 1 to 12 wherein R_1 is C_{1-4}alkyloxycarbonyl or C_{1-4}alkylaminocarbonyl.

14. A compound according to any one of claims 1 to 13 wherein R_2 is C_{2-6}alkyl.

15. A compound according to any one of claims 1 to 14 wherein the compound is
n is 1,

R_1 is cyano, halo or oxadiazolyl optionally substituted with a substituent selected from the group consisting of C_{1-4}alkyl, C_{2-6}alkenyl, C_{3-7}cycloalkyl, hydroxy, C_{1-4}alkoxy, amino, cyano, trifluoromethyl, hydroxyC_{1-4}alkyl, cyanoC_{1-4}alkyl, mono- or di(C_{1-4}alkyl)amino, aminoC_{1-4}alkyl, mono- or di(C_{1-4}alkyl)aminoC_{1-4}alkyl, arylC_{1-4}alkyl, aminoC_{2-6}alkenyl, mono- or di(C_{1-4}alkyl)aminoC_{2-6}alkenyl, furanyl, thienyl, pyrrolyl, oxazolyl, thiazolyl, imidazolyl, isoxazolyl, isothiazolyl, pyrazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, aryl, hydroxycarbonyl, amino-carbonyl, C_{1-4}alkyloxycarbonyl, mono- or di(C_{1-4}alkyl)aminocarbonyl, C_{1-4}alkyl-carbonyl, oxo, thio; and wherein any of the foregoing furanyl, thienyl, pyrrolyl,

oxazolyl, thiazolyl, imidazolyl, isoxazolyl, isothiazolyl, pyrazolyl, oxadiazolyl, thiadiazolyl and triazolyl moieties may optionally be substituted with C_{1-4}alkyl;

R_2 is C_{1-6}alkyl, hydrogen, C_{2-6}alkenyl,

R_3 is nitro, C_{1-6}alkyl optionally substituted with piperidinyl, pyrrolidinyl, $N(R_{4a}R_{4b})$, morpholinyl, pyridyl, cyano, 4-(C_{1-4}alkyl)-piperazin-1-yl.

16. A compound according to claim 1 wherein the compound is

1-(4-Nitro-phenyl)-2-oxo-2,5-dihydro-1H-pyrido[3,2-b]indole-3-carbonitrile;

5-Methyl-1-(4-nitro-phenyl)-2-oxo-2,5-dihydro-1H-pyrido[3,2-b]indole-3-carbonitrile;

5-Isobutyl-1-(4-nitro-phenyl)-2-oxo-2,5-dihydro-1H-pyrido[3,2-b]indole-3-carbonitrile;

5-Allyl-1-(4-nitro-phenyl)-2-oxo-2,5-dihydro-1H-pyrido[3,2-b]indole-3-carbonitrile;

5-Butyl-1-(4-nitro-phenyl)-2-oxo-2,5-dihydro-1H-pyrido[3,2-b]indole-3-carbonitrile;

5-Ethyl-1-(4-nitro-phenyl)-2-oxo-2,5-dihydro-1H-pyrido[3,2-b]indole-3-carbonitrile;

5-(2-Morpholin-4-yl-ethyl)-1-(4-nitro-phenyl)-2-oxo-2,5-dihydro-1H-pyrido[3,2-b]-indole-3-carbonitrile;

5-Methyl-1-(4-nitro-phenyl)-1,5-dihydro-pyrido[3,2-b]indol-2-one;

5-But-3-enyl-1-(4-nitro-phenyl)-2-oxo-2,5-dihydro-1H-pyrido[3,2-b]indole-3-carbonitrile;

1-(4-Nitro-phenyl)-2-oxo-5-(2-pyrrolidin-1-yl-ethyl)-2,5-dihydro-1H-pyrido[3,2-b]-indole-3-carbonitrile;

1-(4-Nitro-phenyl)-2-oxo-5-(2-piperidin-1-yl-ethyl)-2,5-dihydro-1H-pyrido[3,2-b]-indole-3-carbonitrile;

5-(3-Dimethylamino-propyl)-1-(4-nitro-phenyl)-2-oxo-2,5-dihydro-1H-pyrido[3,2-b]-indole-3-carbonitrile;

3-Bromo-5-methyl-1-(4-nitro-phenyl)-1,5-dihydro-pyrido[3,2-b]indol-2-one

5-Methyl-1-(3-nitro-phenyl)-2-oxo-2,5-dihydro-1H-pyrido[3,2-b]indole-3-carbonitrile;

1-(4-Nitro-phenyl)-2-oxo-5-(3-piperidin-1-yl-propyl)-2,5-dihydro-1H-pyrido[3,2-b]-indole-3-carbonitrile;

5-(4-Morpholin-4-yl-butyl)-1-(4-nitro-phenyl)-2-oxo-2,5-dihydro-1H-pyrido[3,2-b]-indole-3-carbonitrile;

1-(4-Nitro-phenyl)-2-oxo-5-(4-pyrrolidin-1-yl-butyl)-2,5-dihydro-1H-pyrido[3,2-b]-indole-3-carbonitrile;

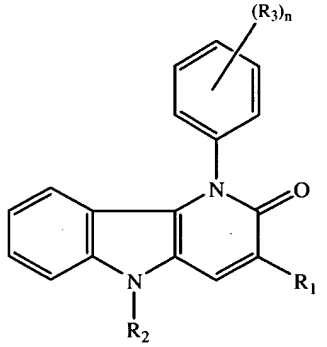
5-[3-(4-Methyl-piperazin-1-yl)-propyl]-1-(4-nitro-phenyl)-2-oxo-2,5-dihydro-1H-pyrido[3,2-b]indole-3-carbonitrile;

5-Cyanomethyl-1-(4-nitro-phenyl)-2-oxo-2,5-dihydro-1H-pyrido[3,2-b]indole-3-carbonitrile;

5-(3-Morpholin-4-yl-propyl)-1-(4-nitro-phenyl)-2-oxo-2,5-dihydro-1H-pyrido[3,2-b]-

indole-3-carbonitrile;
1-(4-Nitro-phenyl)-2-oxo-5-(4-piperidin-1-yl-butyl)-2,5-dihydro-1H-pyrido[3,2-b]-indole-3-carbonitrile;
5-(4-Dimethylamino-butyl)-1-(4-nitro-phenyl)-2-oxo-2,5-dihydro-1H-pyrido[3,2-b]-indole-3-carbonitrile;
1-(4-Nitro-phenyl)-2-oxo-5-pyridin-4-ylmethyl-2,5-dihydro-1H-pyrido[3,2-b]indole-3-carbonitrile;
3-(5-tert-Butyl-[1,2,4]oxadiazol-3-yl)-5-methyl-1-(4-nitro-phenyl)-1,5-dihydro-pyrido[3,2-b]indol-2-one;
5-Methyl-1-(4-nitro-phenyl)-3-(5-trifluoromethyl-[1,2,4]oxadiazol-3-yl)-1,5-dihydro-pyrido[3,2-b]indol-2-one; or an N-oxide, salt or stereoisomer thereof.

17. A compound of formula (I)



(I)

its *N*-oxide, salt, stereoisomeric form, racemic mixture, prodrug, ester or metabolite, wherein

n is 1, 2 or 3;

R_1 is hydrogen, cyano, halo, aminocarbonyl, hydroxycarbonyl, C_{1-4}alkyloxycarbonyl, C_{1-4}alkylcarbonyl, mono- or di(C_{1-4}alkyl)aminocarbonyl, arylaminocarbonyl, *N*-(aryl)-*N*-(C_{1-4}alkyl)aminocarbonyl, methanimidamidyl, *N*-hydroxy-methanimidamidyl, mono- or di(C_{1-4}alkyl)methanimidamidyl, Het_1 or Het_2;

R_2 is hydrogen, C_{1-10}alkyl, C_{2-10}alkenyl, C_{3-7}cycloalkyl, wherein said C_{1-10}alkyl, C_{2-10}alkenyl and C_{3-7}cycloalkyl, each individually and independently, may be optionally substituted with a substituent selected from the group consisting of cyano, $NR_{4a}R_{4b}$, pyrrolidinyl, piperidinyl, homopiperidinyl, piperazinyl, 4-(C_{1-4}alkyl)-piperazinyl, morpholinyl, thiomorpholinyl, 1-oxothiomorpholinyl, 1,1-dioxo-thiomorpholinyl, aryl, furanyl, thienyl, pyrrolyl, oxazolyl, thiazolyl, imidazolyl, isoxazolyl, isothiazolyl, pyrazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, triazinyl, hydroxycarbonyl, C_{1-4}alkylcarbonyl, N($R_{4a}R_{4b}$)carbonyl, C_{1-4}alkyloxycarbonyl, pyrrolidin-1-yl-carbonyl, piperidin-1-ylcarbonyl, homopiperidin-1-ylcarbonyl, piperazin-1-yl-

carbonyl, 4-(C_{1-4}alkyl)-piperazin-1-ylcarbonyl, morpholin-1-ylcarbonyl, thiomorpholin-1-ylcarbonyl, 1-oxothiomorpholin-1-ylcarbonyl and 1,1-dioxo-thiomorpholin-1-ylcarbonyl;

R_3 is nitro, cyano, amino, halo, hydroxy, C_{1-4}alkyloxy, hydroxycarbonyl, aminocarbonyl, C_{1-4}alkyloxycarbonyl, mono- or di(C_{1-4}alkyl)aminocarbonyl, C_{1-4}alkylcarbonyl, methanimidamidyl, mono- or di(C_{1-4}alkyl)methanimidamidyl, *N*-hydroxy-methanimidamidyl or Het_1;

R_{4a} is hydrogen, C_{1-4}alkyl or C_{1-4}alkyl substituted with a substituent selected from the group consisting of amino, mono- or di(C_{1-4}alkyl)amino, pyrrolidinyl, piperidinyl, homopiperidinyl, piperazinyl, 4-(C_{1-4}alkyl)-piperazinyl, morpholinyl, thiomorpholinyl, 1-oxothiomorpholinyl and 1,1-dioxo-thiomorpholinyl;

R_{4b} is hydrogen, C_{1-4}alkyl or C_{1-4}alkyl substituted with a substituent selected from the group consisting of amino, mono- or di(C_{1-4}alkyl)amino, pyrrolidinyl, piperidinyl, homopiperidinyl, piperazinyl, 4-(C_{1-4}alkyl)-piperazinyl, morpholinyl, thiomorpholinyl, 1-oxothiomorpholinyl and 1,1-dioxo-thiomorpholinyl;

aryl is phenyl optionally substituted with one or more substituents each individually selected from the group consisting of C_{1-6}alkyl, C_{1-4}alkoxy, halo, hydroxy, amino, trifluoromethyl, cyano, nitro, hydroxyC_{1-6}alkyl, cyanoC_{1-6}alkyl, mono- or di(C_{1-4}alkyl)amino, aminoC_{1-4}alkyl, mono- or di(C_{1-4}alkyl)aminoC_{1-4}alkyl;

Het_1 is a 5-membered ring system wherein one, two, three or four ring members are heteroatoms each individually and independently selected from the group consisting of nitrogen, oxygen and sulfur, and wherein the remaining ring members are carbon atoms; and, where possible, any nitrogen ring member may optionally be substituted with C_{1-4}alkyl; any ring carbon atom may, each individually and independently, optionally be substituted with a substituent selected from the group consisting of C_{1-4}alkyl, C_{2-6}alkenyl, C_{3-7}cycloalkyl, hydroxy, C_{1-4}alkoxy, halo, amino, cyano, trifluoromethyl, hydroxyC_{1-4}alkyl, cyanoC_{1-4}alkyl, mono- or di(C_{1-4}alkyl)amino, aminoC_{1-4}alkyl, mono- or di(C_{1-4}alkyl)aminoC_{1-4}alkyl, arylC_{1-4}alkyl, aminoC_{2-6}alkenyl, mono- or di(C_{1-4}alkyl)aminoC_{2-6}alkenyl, furanyl, thienyl, pyrrolyl, oxazolyl, thiazolyl, imidazolyl, isoxazolyl, isothiazolyl, pyrazolyl, oxadiazolyl, thiadiazolyl, triazolyl, tetrazolyl, aryl, hydroxycarbonyl, aminocarbonyl, C_{1-4}alkyloxycarbonyl, mono- or di(C_{1-4}alkyl)aminocarbonyl, C_{1-4}alkylcarbonyl, oxo, thio; and wherein any of the foregoing furanyl, thienyl, pyrrolyl, oxazolyl, thiazolyl, imidazolyl, isoxazolyl, isothiazolyl, pyrazolyl, oxadiazolyl, thiadiazolyl and triazolyl moieties may optionally be substituted with C_{1-4}alkyl;

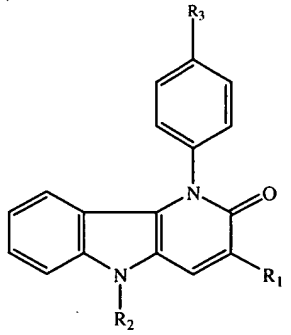
Het_2 is pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl or triazinyl, wherein any ring carbon atom of each of said 6-membered nitrogen containing aromatic rings may

optionally be substituted with a substituent selected from the group consisting of C_{1-4}alkyl;

for use as a medicine.

18. A compound as described in claim 17 for use as a medicine wherein
R_1 is cyano, C_{1-4}alkyloxycarbonyl or C_{1-4}alkylaminocarbonyl;
R_2 is hydrogen or C_{1-6}alkyl;

19. A compound as described in claim 17 or 18 for use as a medicine wherein the compound has the formula (II)



(II)

for use as a medicine.

20. A compound as described in any one of claim 17 to 19 wherein R_1 is cyano, methyloxycarbonyl, methylaminocarbonyl, ethylaminocarbonyl, ethyloxycarbonyl.

21. A compound as described in any one of claim 17 to 20 wherein R_2 is hydrogen or methyl.

22. A compound as described in any one of claim 17 to 21 wherein R_1 is cyano and R_2 is hydrogen or methyl.

23. Use of a compound of formula (I) as defined in any one of claims 17 to 22 for the manufacture of a medicament for preventing, treating or combating infection or disease associated with infection with HIV virus.

24. Use of a compound of formula (I) as defined in any one of claims 17 to 22 for the manufacture of a medicament for inhibiting the replication of HIV virus.

25. Use of a compound of formula (I) according to claim 23 or 24 characterized in that the reverse transcriptase of the HIV virus is mutant.

26. A pharmaceutical composition, comprising an effective amount of at least one compound of formula (I) as defined in any one of claims 1 to 17 and a pharmaceutically tolerable excipient.

27. A product containing at least one compound of formula (I) as defined in any one of claims 1 to 17 and an antiretroviral agent as a combined preparation for the simultaneous, separate or sequential use in antiretroviral therapy.